

November 30, 1959

MEMORANDUM TO: 1401 File

SUBJECT: Special Move Instruction  
"P" Opr Code (Optional Feature)

The "P" operational code is performed in the following manner:

1. The A field area starting at the high order position of the A field will be moved into the B field area starting at its' high order address.
2. Word Marks will be transferred from the A field to the B field and all Word Marks in the B field will be removed.
3. Data will be transferred from left to right.
4. This operation is terminated at the end of a B cycle after a record mark or a group mark plus a word mark is recognized in the A field. The record mark or group mark plus a word mark will be transferred to the B field.

Example:

		A	B	C	R	1	2	3	GM
Storage	Address	400	401	402	403	404	405	406	407
	B field	<u>8</u>	7	6	<u>5</u>	4	3	<u>2</u>	1
Storage	Address	575	576	577	578	579	580	581	582

A line under the character indicates a Word Mark.

Execute instruction: P(400)(575)

	A field	A	B	C	R M	1	2	3	GM
Storage Address	400	401	402	403	404	405	406	407	
	B field	A	B	C	R M	4	3	2	1
Storage Address	575	576	577	578	579	580	581	582	

A suggested use for this special move instruction is when a grouped variable length record is read from tape and each record is to be printed out on a different line.

Sample Program

Address	Code	Operation	Action
001	M(\$U1)	(600)R	Read Tape
009	P(600)	(200)	Transfer 1st Record
016	Q(024)		Store Location of 2nd Record
020	2		Print 1st Record
021	P(XXX)	(200)	Transfer 2nd Record
028	Q(036)		Store Location of 3rd Record
032	2		Print 2nd Record
033	P(XXX)	(200)	Transfer 3rd Record
040	2		Print 3rd Record
041	B(001)		Repeat

W. S. Schaffer  
Staff Engineer  
Department 280

WSS:bd